PROPOSAL EVALUATION

Proposition 84 Integrated Regional Water Management (IRWM) Grant Program

Implementation Grant, Round 2, 2013

Applicant	Mojave Water Agency	**Amount Requested**	$ 8,240,000
Proposal Title	Mojave Water Agency 2013 Proposition 84 Round 2 IRWM Implementation Grant	**Total Proposal Cost**	$ 200,561,701

PROJECT SUMMARY

The proposal includes two projects claiming the following benefit types: water supply, water quality, and flood damage reduction. The projects include: (1) Hi-Desert Water District Wastewater Treatment and Water Reclamation Project and Grant Reporting Tasks, and (2) Victor Valley Wastewater Reclamation Authority Subregional Reclamation Project.

PROPOSAL SCORE

Criteria	Score/ Max. Possible	Criteria	Score/ Max. Possible
Work Plan	9/15	Technical Justification	8/10
Budget	3/5		
Schedule	5/5	Benefits and Cost Analysis	15/30
Monitoring, Assessment, and Performance Measures	3/5	Program Preferences	6/10
		Total Score (max. possible = 80)	**49**

EVALUATION SUMMARY

WORK PLAN

The criterion is less than fully addressed and is not supported by thorough documentation or logical rationale. The goals and objectives of each project of the proposal are stated in terms of meeting existing IRWM regional goals, but these regional goals are extremely broad (i.e., groundwater levels, water supply cost), and specific information is not adequately presented on how the projects will help meet these objectives. A tabulated overview of each project is presented, but the information of the projects and project status is minimal. For instance, for Project 2, the status given is "ready to construct; bid documents secured," but without indicating the status of environmental review, permits required, or plans and specs for the project. A map showing relative project locations is presented. The discussion of the synergies or linkages only states there are no linkages between the projects, yet the applicant states on page 1 that both projects seek to serve disadvantaged communities by reclaiming wastewater for recharging groundwater aquifers, so there would appear to be linkages and synergies by virtue of their additive effects in an over-drafted groundwater basin. In addition, Project 2 consists of two identical reclamation plants in the same service area, so presumably there ought to have been some consideration to optimizing their respective capacities and locations.

Tasks include some appropriate deliverables and reporting submittals, such as quarterly and final progress reports. However, description of construction activities is inadequate. No details are provided for either project on scope of construction, such as subtasks, steps, equipment involved, project components, or project footprint, by which to concur that the projects are implementable.

Plans and specifications are referenced for Project 1, but are not included or referenced for Project 2. The application does not include Data Management and Monitoring Deliverables consistent with the IRWM Plan Standards.

BUDGET

The budgets for the projects in the proposal have detailed cost information, but not all costs appear reasonable and supporting documentation is lacking for a majority of the budget categories. The applicant provides supporting documentation for construction elements comprised of engineer's probable estimates of cost. The detailed information is presented in a manner that makes it inconsistent with the summary budget tables due to the differences in format and the absence of cross references. The total construction costs given in the engineer's estimate appear inconsistent with those given in the summary budgets. For example, the detailed "Opinion of Project Costs" for Project 1 provides a total capital cost for the treatment plant of $7,701,000), plus a total of $4,982,000 for the collection system, while the summary budget table for the construction task is stated as $116,271,000. For Project 2, the "Detailed Cost Estimate" indicates a total capital cost of $32,390,429 for one plant, or $64,780,858 for two plants, while the work plan task construction line items costs are stated as totaling $63,481,702.

Detailed budget information or estimates are generally not provided for non-construction related tasks like grant management, surveys, and studies. Only lump sum amounts are provided for these items (i.e., $8,000,000 for engineering and architectural fees for Project 2). Therefore, it is impossible to determine if these amounts are reasonable. The applicant does not indicate how planning, design, engineering, and construction management activity costs were obtained.

Labor rates for different classifications and number of hours to perform each task are not provided, only monthly rates for construction-related work for Project 2, provided in an engineer's estimate. A summary budget is provided for the two projects.

SCHEDULE

The schedule is consistent with the work plan and budget, is reasonable, and demonstrates a readiness to begin construction. Construction of Project 2 is scheduled to begin July 2013, prior to the grant award date and before October 2014. CEQA documentation has been completed for both projects. The tasks in the schedule are consistent with the tasks described in the work plan.

MONITORING, ASSESSMENT, AND PERFORMANCE MEASURES

The criterion is less than fully addressed and documentation and or rationales are incomplete or insufficient. The applicant presents adequate monitoring and assessment for most project benefits, but are missing for some tasks (e.g., no assessment, performance measure or goals included for public outreach component).

Because the projects are wastewater treatment and disposal facilities regulated by the WDRs, permit conditions should provide assurances the facilities perform adequately with respect to discharge standards. However, the proposal's stated goals in helping meet IRWMP objectives and goals are not matched with appropriate targets to confirm project performance. For example, the benefits claimed in the work plan for reducing septic discharge to groundwater while enhancing groundwater recharge (or overdraft correction) do not appear to be measured against a pre-project baseline (such as groundwater well quality and levels in the vicinity of the abandoned septic tanks). With respect to groundwater

quality, only monitoring parameters of treatment facility effluent water quality measurements are specified, but not for groundwater quality monitoring. No ambient groundwater quality benchmarks are stated and unspecified groundwater samples will only be monitored in the immediate vicinity of the recharge ponds, so assessment of evidence that the project benefits will improve groundwater quality more generally within the basin appears not to be possible from the proposed monitoring.

TECHNICAL JUSTIFICATION

The proposal is technically justified to achieve the claimed benefits related to groundwater quality but is not fully supported by documentation that demonstrates the technical adequacy of the project or the physical benefits are not well described. The projects are technically justified to achieve the primary benefit of reduced overall net nitrate loading of the groundwater as treated wastewater reduces the nutrients in the wastewater and treated wastewater is diverted for irrigation use where plants can utilize much of the remaining nitrate before it percolates beyond the root zone and into the groundwater. But, benefit descriptions for the recharge benefit are not consistently described. For example, the benefits for both projects include water supply benefits in the form of groundwater recharge to correct basin overdraft conditions. The applicant then states the opposite on page 7-1, that there is no additional net water recharged from the project. In addition, the technical justification does not address the fact that Project 1 could actually lessen the amount of groundwater recharge that currently exists from leach field disposal because wastewater will undergo treatment and disposal which will increase water loss from evaporation due to sludge drying activities and from effluent holding and percolation basins. Groundwater levels could continue to fall, impacting the availability of groundwater supplies. Imported water supplies may have to increase to meet deficits in groundwater supplies, and result in increased GHG emissions rather than lowering them as claimed.

BENEFITS AND COSTS ANALYSIS

Collectively the proposal is likely to provide a medium level of benefits in relationship to cost, but the quality of the analysis or clear and complete documentation is lacking.

Project 1 is economically justified by an alternative that would pump and remove wastewater from the region. This without-project condition is not consistent with statements that imply, without-project, the septic systems could continue to operate. The transfer of water among regions is not a state benefit, but this is a small share of the claimed benefit. It would be nice to see how groundwater quality conditions would change in the future if nothing is done. The proposed project appears to be very cost effective for meeting the RWQCB mandate and the project appears to be economical.

Project 2 would develop recycled water, but it is not clear how much water supply benefit should be claimed from the State perspective. Claimed benefits applied to 4,480 AF at full project include replacement water purchase ($515 per af), reduced groundwater pumping ($215 per af), supplemental supply capital ($895 per af) and main treatment plant cost savings ($824 per af). First, if the entire 4,480 AFY could be provided by groundwater pumping and replacement water, then no supplemental supply capital should be required, so this appears to be a double-count. Second, wastewater is currently discharged into the Mojave River. Some of the wastewater effluent in the without-project condition is captured for beneficial use. If so, the potential water supply benefits of this project to the State are limited.

PROGRAM PREFERENCES

Applicant claims that five program preferences and seven statewide priorities will be met with project implementation. However, applicant demonstrates high degree of certainty, and adequate documentation for five of the Preferences claimed: (1) Effectively integrate water management programs and projects within hydrologic region identified in the CWP; RWQCB region or subdivision or other region or sub-region specifically identified by DWR; (2) Address critical

water supply or water quality needs of disadvantaged communities within the region; (3) Use and Reuse Water More Efficiently; (4) Protect Surface Water and Groundwater Quality; and (5) Ensure Equitable Distribution of Benefits.